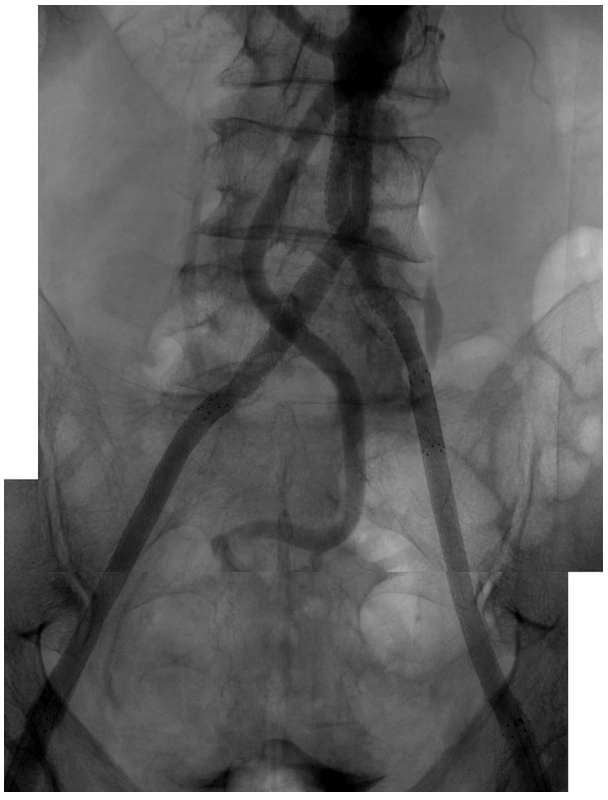
CASES



TCTAP C-222

Simultaneous Intervention for Coarctation and Aortoarteritis in Same Patient

Lijo Varghese, George Joseph
Christian Medical College Vellore, India

[Clinical Information]
Patient initials or identifier number:
631249F
Relevant clinical history and physical exam:
History: 45 years old lady presented with bilateral lower limb claudication for 3 years. She was diagnosed as coarctation of aorta in 1995 with 50mm gradient across the segment (invasive cath done then elsewhere, no mention of infra-renal aortic gradient), but was lost to follow up.
Examination: BP in upper limbs: right- 180/100mm & left-170/94
BP in lower limbs- not recordable clinically
Bilateral carotid bruit present
Relevant test results prior to catheterization:
ECG: Sinus rhythm. LVH
CXR: CTR- 50%; LV apex
ECHO: LVH, Normal LV systolic function
Relevant catheterization findings:

- Coronary angiogram- normal
- Arch angiogram- Dilated arch and arch vessels with discrete calcific narrowing seen just after LSCA with 60mm gradient across. No post stenotic dilatation.
- Abdominal angiogram- left upper renal artery occluded; discrete stenosis in infra-renal aorta (below IMA) with 40mm gradient across.
- REIA- occluded; Left sided iliacs- normal

[Interventional Management]
Procedural step:
Percutaneous angioplasty with covered stents to coarct segment and infra renal aorta done with good result and no gradient between arch and left femoral artery
Coarct Segment: Atrium Advanta V12 16x61mm
Infra-renal Aorta: Atrium Advanta V12 10x38mm
Case Summary:
Rare combination of takayasu arteritis and coarctation in the same patient which was successfully managed with percutaneous angioplasty.

TCTAP C-223

Successful Endovascular Therapy for Acute Limb Ischemia Due to Kinking of Bifurcated Graft for Abdominal Aortic Aneurysm

Makoto Watanabe, Taketsugu Tsuchiya
Kanazawa Medical University, Japan

[Clinical Information]
Patient initials or identifier number:
S.N.
Relevant clinical history and physical exam:
Early sixties, male, he had suffered from claudication for years. Angiography revealed abdominal aortic aneurysm and stenosis of left common iliac artery (CIA). He underwent open repair using bifurcated graft (Triplex, Terumo, Japan) but severe pain occurred suddenly in left leg at the night of operation day. On next day, he was transferred to our division and diagnosed acute limb ischemia due to occlusion of left limb of bifurcated graft by physical findings.
Relevant test results prior to catheterization:
Ultra-sound sonography and enhanced CT showed occlusion of left limb of bifurcated graft and patent common femoral artery (CFA) with poor collaterals.
[Interventional Management]
Procedural step:
Initial angiography through 6 french Destination guiding sheath (Terumo, Japan) inserted from right arm revealed occlusion of left limb of bifurcated graft. At first, ante-grade proceeding of 0.018 Treasure guide wire (SJM, US) supported by 4 french angio-catheter was tried but failed. Next, Xsupport micro-catheter (Zeon, Japan) was inserted into left CFA for bi-directional approach. Retro-grade penetration of 0.018 Treasure guide wire was also quite difficult, so occlusion was thought to occur by kinking of limb of graft. Intra-vascular ultra-sonography could help the guide wire to pass through tiny niche and pulling out the tip of the guide wire through ante-grade Destination was successful. On powerful back-up position by holding both ends of the guide wire, 6.0-20mm Jackal balloon (Kaneka, Japan) could pass through. After careful undersized ballooning, three (8.0-61mm, 10-60mm, and 12-41mm) Epic stents (Boston, US) were deployed in occluded limb of graft from distal to proximal. Post dilatation by 10-20mm Sterling ES balloon (Boston, US) at kinking part ended up with optimal result. One month later, angiography at endovascular therapy (EVT) for left superficial femoral artery (SFA) showed that Epic stent could stretch the kinked limb of graft. After successful EVT for SFA, he could discharge on his foot.

TCTAP C-224

Hybrid Surgical and Endovascular Intervention for Acute Limb Ischemia Due to Tumor Embolism of the Abdominal Aorta Originated from the Lung Tumor (Pleomorphic Carcinoma) Which Extended to the Left Atrium via the Pulmonary Vein

Nobuhito Yagi
Okinawa Chubu Hospital, Japan

[Clinical Information]
Patient initials or identifier number:
M.G
Relevant clinical history and physical exam:
A 62-year-old man presented to the emergency department complaining of sudden onset of numbness of bilateral lower limbs resulting in difficulty in walking. The patient had been previously well except for a history of hypertension and dyslipidemia. Physical examination revealed severe cyanosis of bilateral lower limbs and the pulse of the femoral arteries and distal arteries were not detectable.
Relevant test results prior to catheterization:
An electrocardiogram did not show atrial fibrillation. A huge mass shadow was detected in the left upper lung field in a chest roentogenogram. A computed tomographic (CT) scan of the chest revealed a huge mass (8×13 cm) with lobulated border and necrotic cavities. The tumor extended directly to the left atrium via the left pulmonary vein. A transesophageal echocardiography revealed huge mobile mass in the left atrium which protruded into the left ventricle across the mitral valve during diastole. The abdominal aorta was totally occluded down to the common iliac arteries due to possible tumor emboli.
Relevant catheterization findings:
An emergency aortography showed a total occlusion of the abdominal aorta at its bifurcation, which was presumed to be due to tumor emboli from the left atrium.
[Interventional Management]
Procedural step:
An emergency embolectomy was performed with hybrid surgical and endovascular intervention using a Fogarty balloon catheter and aspiration catheter through arteriotomy in the bilateral common femoral arteries. Substantial amount of thromboembolic material including tumor-like tissue and thrombus were retrieved, and reperfusion to both lower limbs were successfully accomplished.
Case Summary:
A 62-year-old man presented to the emergency department complaining of sudden onset of numbness of bilateral lower limbs resulting in difficulty in walking. Physical examination revealed severe cyanosis of bilateral lower limbs and the pulse of the femoral arteries and distal arteries were not detectable. A huge mass shadow was detected in the left upper lung field in a chest